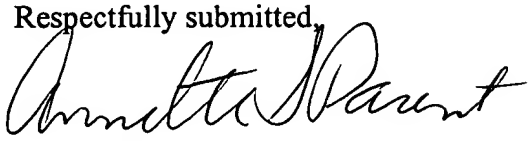
REMARKS:

Claims 1-26 are pending.

Amendment is made to eliminate all multiple dependencies from the claims, thereby avoiding the need to pay the multiple dependent surcharge.

Respectfully submitted,



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MARKED-UP VERSION OF THE CHANGES TO THE CLAIMS

3. (amended) A polypeptide variant as recited in claim [1 or 2], claim 1 characterized in said oligopeptide comprises amino acid sequence RKRA (SEQ ID NO:3) or RKRAKHKQ (SEQ ID NO:4).

4. (amended) A polypeptide variant as recited in [any one of claims 1 to 3], claim 1 characterized in said oligopeptide is added to the N-terminus and/or inserted into the N-terminal region, and/or substitutes a part of the N-terminal region.

5. (amended) A polypeptide variant as recited in [any one of claims 1 to 4], claim 1 characterized in that the amino acid sequence of said polypeptide variant further contains a sequence of relevance to recombinant expression at the N-terminus, said sequence of relevance to recombinant expression being M or MZ, where M stands for methionine and Z stands for one or more amino acids.

6. (amended) A polypeptide variant as recited in [any one of claims 1 to 5], claim 1 characterized in that said polypeptide variant further contains a His-tag.

7. (amended) A polypeptide variant as recited in [any one of claims 1 to 6], claim 1 characterized in that said polypeptide is altered by addition, substitution, insertion, inversion, and/or deletion, where said polypeptide altered by addition substitution, insertion, inversion and/or deletion shows at least 10% of the biological activity of the unaltered polypeptide, and/or at least 50% homology to the unaltered polypeptide.

8. (amended) A polypeptide variant as recited in [any one of claims 1 to 7], claim 1 characterized in that said polypeptide is BMP-2, BMP-4, BMP-5, BMP-6, BMP-7/OP-l, or BMP-8/OP-2.

9. (amended) A polypeptide variant as recited in [any one of claims 1 to 8], claim 1 characterized in that said oligopeptide is inserted before the cysteine knot.

10. (amended) A polypeptide variant as recited in claim [8 or 9], claim 8, characterized in that said polypeptide variant has the amino acid sequence SEQ ID NO:5 (T3) or SEQ ID NO:6 (T4).

11. (amended) A polypeptide variant as recited in [any one of claims 1 to 10], claim 1 characterized in that said polypeptide variant is a polymer, oligomer, or dimer of said polypeptide variant as recited in ***any one of claims 1 to 10***.

12. (amended) A nucleic acid molecule, comprising a nucleic acid sequence encoding a polypeptide variant as recited in [any one of claims 1 to 11], claim 1.

14. (amended) A nucleic acid molecule as recited in claim [12 or 13], claim 12 further comprising a promoter suited to control expression, wherein said nucleic acid sequence encoding a polypeptide variant is under the control of said promoter.

15. (amended) A nucleic acid molecule as recited in [any one of claims 12 to 14], claim 12 wherein said nucleic acid molecule contains at least part of a vector.

16. (amended) Host cell, containing a nucleic acid molecule as recited in [any one of claims 12 to 15], claim 12 wherein said host cell is a prokaryotic or eukaryotic cell suitable for expression of said nucleic acid molecule.

17. (amended) A process for producing a polypeptide variant with increased heparin-binding ability as recited in [any one of claims 1 to 11], claim 1, comprising:

addition to the amino acid sequence of a polypeptide of at least one oligopeptide containing an amino acid sequence selected from SEQ ID NO:1 or SEQ ID NO:2; and/or

insertion into the amino acid sequence of a polypeptide of at least one oligopeptide containing an amino acid sequence selected from SEQ ID NO:1 or SEQ ID NO:2; and/or

substitution of at least one oligopeptide sequence naturally occurring within the amino acid sequence of a polypeptide by one oligopeptide containing an amino acid sequence selected from SEQ ID NO:1 or SEQ ID NO:2.

19. (amended) A process as recited in claim [17 or 18], claim 17 characterized in that said process comprises gene technological processes.

20. (amended) A process as recited in [any one of claims 17 to 19], claim 17, characterized in that said process comprises:

a) in vitro mutagenesis of a nucleic acid encoding a polypeptide, so that

(i) to the nucleic acid encoding said polypeptide is added at least one nucleic acid encoding an oligopeptide containing an amino acid sequence that is selected from SEQ ID NO:1 or SEQ ID NO:2; and/or

(ii) into the nucleic acid encoding said polypeptide is inserted at least one nucleic acid encoding an oligopeptide containing an amino acid sequence that is selected from SEQ ID NO:1 or REQ ID NO:2; and/or

(iii) at least one nucleic acid sequence naturally occurring within the nucleic acid sequence encoding said polypeptide is substituted by a nucleic acid sequence encoding an oligopeptide containing an amino acid sequence selected from SEQ ID NO:1 or SEQ ID NO:2;

b) cloning of the mutated nucleic acid into a suitable expression vector;

c) transformation/transfection of a suitable host cell with the expression vector obtained;

d) cultivation of said transformed/transfected host cell under conditions suitable for expression;

e) isolation, and if necessary renaturation, of the expressed polypeptide variant.

21. (amended) A process as recited in [any one of claims 17 to 20], claim 17 characterized in that said process is carried out within a prokaryotic host cell such as preferably E. coli.

22. (amended) A process as recited in [any one of claims 17 to 20], claim 17 characterized in that said process is carried out within a eukaryotic cell, preferably a yeast, plant or insect cell, CHO or COS cell.

23. (amended) A pharmaceutical composition, comprising a polypeptide variant as recited in [any one of claims 1 to 11] claim 1 and, optionally, physiologically compatible additives.

24. (amended) Use of a polypeptide variant as recited in [any one of claims 1 to 11] claim 1 to stimulate osteogenesis or wound healing, or to treat inflammation or cancer.

25. (amended) A composition for osteoinduction, comprising a polypeptide variant as recited in [any one of claims 1 to 11] claim 1 and a carrier selected from among heparin, hydroxyapatite, hyaluronic acid, synthetic polymers, and collagen.

26. (amended) An osteoinductive matrix, characterized in that said matrix contains or is coated with heparin or heparin-like substances and polypeptide variants as recited in [any one of claims 1 to 11] claim 1 are adsorbed to said heparin or heparin-like substances.